

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-10. (canceled).

Claim 11. (previously presented): A method for coupling an ATM communication layer to a plurality of N mutually time-independent time division multiplex communication terminals having an overall payload cell rate CR_N , the method comprising the steps of:

generating a control signal sequence with a clock rate corresponding to the overall payload cell rate CR_N of the N time-division multiplex communication terminals, whereby control signals in the control signal sequence represent one of a first and a second status;

offering a fixed data pattern;

transmitting ATM cells coming from the ATM communication layer into an ATM cell waiting list;

transmitting, on demand, an ATM cell from the ATM waiting list to the requesting time-division multiplex communication terminal when a respectively oldest control signal of the control signal sequence represents the first status, and transmitting the fixed data pattern to the requesting time-division multiplex communication terminal when the oldest control signal of the control signal sequence represents the second status; and

deleting the oldest control signal of the control signal sequence.

Claim 12. (original): A method for coupling an ATM communication layer to a plurality of N mutually time-independent time-division multiplex communication terminals as claimed in claim 11, the method further comprising the steps of:

allocating a control signal that represents the first status to each ATM cell of the ATM waiting list in the control signal sequence;

carrying out a check, when a new control signal of the control signal sequence is generated in coincidence with the prescribed clock rate to see whether an ATM cell to which no control signal representing the first status is allocated is still present in the ATM waiting list;

generating a control signal representing the first status when an ATM cell to which no control signal representing the first status is allocated is still present in the ATM waiting list; and
generating a control signal representing the second status when an ATM cell to which no control signal representing the first status is allocated is not present in the ATM waiting list.

Claim 13. (original): A method for coupling an ATM communication layer to a plurality of N mutually time-independent time-division multiplex communication terminals as claimed in claim 11, wherein the control signal representing the first status is represented by a logical "1" and the control signal representing the second status is represented by a logical "0".

Claim 14. (preciously presented): A method for coupling an ATM communication layer to a plurality of N mutually time-independent time-division multiplex communication terminals as claimed in claim 11, wherein the control signal sequence has a length of up to $3 \cdot N$ signals.

Claim 15. (original): A method for coupling an ATM communication layer to a plurality of N mutually time-independent time-division multiplex communication terminals as claimed in claim 11, the method further comprising the step of enabling a cell transmission from the ATM communication layer into the ATM waiting list when the plurality of ATM cells present in the waiting list minus the plurality of control signals of the control signal sequence representing the first status is $\leq X$.

Claim 16. (original): A method for coupling an ATM communication layer to a plurality of N mutually time-independent time-division multiplex communication terminals as claimed in claim 15, wherein $X \geq 1$.

Claim 17. (original): A method for coupling an ATM communication layer to a plurality of N mutually time-independent time-division multiplex communication terminals as claimed in claim 16, wherein $X = 1$.

Claim 18. (original): A method for coupling an ATM communication layer to a plurality of N mutually time-independent time-division multiplex communication terminals as claimed in claim 11, wherein the N time-division multiplex terminals are uncorrelated.

Claim 19. (original): A method for coupling an ATM communication layer to a plurality of N mutually time-independent time-division multiplex communication terminals as claimed in claim 18, the method further comprising the step of dividing the ATM cells and the cells containing the fixed data pattern onto the N communication terminals according to a round-robin method.

Claim 20. (previously presented): An apparatus for coupling an ATM communication layer to a plurality of N mutually time-independent time-division multiplex communication terminals having an overall payload cell rate CR_N , the apparatus comprising:

- a generator for generating a control signal sequence with a clock rate corresponding to the overall payload cell rate CR_N of the N time-division multiplex communication terminals, whereby control signals in the control signal sequence represent one of a first and a second status;

- a device for offering a fixed data pattern;

- a first transmitter for transmitting ATM cells coming from the ATM communication layer into an ATM cell waiting list;

- a second transmitter for transmitting an ATM cell from the ATM cell waiting list to a requesting time-division multiplex communication terminal when a respectively oldest control signal of the control signal sequence represents the first status, and transmitting the fixed data pattern to the requesting time-division multiplex communication terminal when the oldest control signal of the control signal sequence represents the second status; and

- a device for deleting the oldest control signal of the control signal sequence.